

Work Order ID 101089

101089

Page 1

April-30-13 2:39:54 PM

Item ID: D2574

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Saddle, Aft In 205

Start Date: 5/06/13

Start Qty: 12.00

12

Cust Item ID:

Required Date: 5/06/13

Req'd Qty: 12.00

12

Customer:

Reference:

Run Start ***NR1***

Approvals:

Process Plan: MLJ

Date: 13-05-01

Tooling:

Date:

Stop ***NR2***

QC:

Date:

SPC (Y/N):

Date:

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

Draw Nbr

Revision Nbr

D2574

F

100

0.00

100

HAAS CNC VERTICAL MACHINING #1

HAAS f

Memo

0.00

HAAS CNC vertical machine #1

Program Batch No. 101089

Double check by: MLJ

1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets

2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets

3-Machine Step No 3 per Folio FA051 and insp

JFC 2013-06-26 12
OMX 13/06/27

110

0.00

110

CONVENTIONAL MILLING MACHINE

Mill Conv

Memo

0.00

Conventional Milling Machine

Machine keyway as per dwg D2573 & D2574

JFC 2013-06-26 12
OMX 13/06/27

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | | | | | | | | |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| Landing Gear | General | Other |
|---|---|--|
| <input type="checkbox"/> Bending | <input type="checkbox"/> Bend | <input type="checkbox"/> Grain |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route | <input type="checkbox"/> Hardware |
| <input type="checkbox"/> Cracks | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete |
| <input type="checkbox"/> Crushed/Crimped | <input type="checkbox"/> Burrs | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs | <input type="checkbox"/> Contamination | <input type="checkbox"/> Maintenance |
| <input type="checkbox"/> Heat Treat | <input type="checkbox"/> Countersink | <input type="checkbox"/> Misabeled |
| <input type="checkbox"/> Inspection Strip in Tube | <input type="checkbox"/> Cut Too Short | <input type="checkbox"/> Misread |
| <input type="checkbox"/> Ripples in Bend | <input type="checkbox"/> Drill Holes | <input type="checkbox"/> Offset |
| <input type="checkbox"/> Torque Waves in Extrusion | <input type="checkbox"/> Drawing | <input type="checkbox"/> Out of Calibration |
| <input type="checkbox"/> Turning Sequence | <input type="checkbox"/> Finish | <input type="checkbox"/> Out of Sequence |
| <input type="checkbox"/> Wave/Twist in Tube | <input type="checkbox"/> Folio | <input type="checkbox"/> Outside Dimensions |
| | | <input type="checkbox"/> Ovalized |
| | | <input type="checkbox"/> Over/Under tolerance |
| | | <input type="checkbox"/> Part Incorrect |
| | | <input type="checkbox"/> Part Lost/Missing |
| | | <input type="checkbox"/> Part Moved |
| | | <input type="checkbox"/> Positioned Wrong |
| | | <input type="checkbox"/> Power Loss/Surge |
| | | <input type="checkbox"/> Pressure/Forced |
| | | <input type="checkbox"/> Temperature/Cure |
| | | <input type="checkbox"/> Weld |
| | | <input type="checkbox"/> Wrong Stock Pulled |
| | | <input type="checkbox"/> Other |

101089

April-30-13 2:39:54 PM

N900040100

Stop *NS2*

12

12

Reference:

Run Start *NR1*

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

[illegible]

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | | | | | | | | |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data <input type="checkbox"/> | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | |
| Setup <input type="checkbox"/> | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | |

FAULT CATEGORY

| | | | | |
|---|---|---|--|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|---|---|---|--|---|

Work Order ID 101089

101089

Page 3

April-30-13 2:39:54 PM

Item ID: D2574

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Saddle, Aft In 205

Start Date: 5/06/13

Start Qty: 12.00

12

Cust Item ID:

Required Date: 5/06/13

Req'd Qty: 12.00

12

Customer:

Reference:

Run Start

NR1

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

NR2

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

150

Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

160

QC3- Inspect Part Finish

0.00

160

QC

Memo

0.00

Quality Control

170

Identify as per dwg & Stock Location: SI442

0.00

170

Packaging

Memo

0.00

Packaging

12x6 m/f 13/07/03

12x 13.7.3. 34

12x M.H. 13-07-03

m125620



NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | | | | | | | | |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| Landing Gear | General | Other |
|---|---|--|
| <input type="checkbox"/> Bending | <input type="checkbox"/> Bend | <input type="checkbox"/> Grain |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route | <input type="checkbox"/> Hardware |
| <input type="checkbox"/> Cracks | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete |
| <input type="checkbox"/> Crushed/Crimped | <input type="checkbox"/> Burrs | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs | <input type="checkbox"/> Contamination | <input type="checkbox"/> Maintenance |
| <input type="checkbox"/> Heat Treat | <input type="checkbox"/> Countersink | <input type="checkbox"/> Misabeled |
| <input type="checkbox"/> Inspection Strip in Tube | <input type="checkbox"/> Cut Too Short | <input type="checkbox"/> Misread |
| <input type="checkbox"/> Ripples in Bend | <input type="checkbox"/> Drill Holes | <input type="checkbox"/> Offset |
| <input type="checkbox"/> Torque Waves in Extrusion | <input type="checkbox"/> Drawing | <input type="checkbox"/> Out of Calibration |
| <input type="checkbox"/> Turning Sequence | <input type="checkbox"/> Finish | <input type="checkbox"/> Out of Sequence |
| <input type="checkbox"/> Wave/Twist in Tube | <input type="checkbox"/> Folio | <input type="checkbox"/> Outside Dimensions |
| | | <input type="checkbox"/> Ovalized |
| | | <input type="checkbox"/> Over/Under tolerance |
| | | <input type="checkbox"/> Part Incorrect |
| | | <input type="checkbox"/> Part Lost/Missing |
| | | <input type="checkbox"/> Part Moved |
| | | <input type="checkbox"/> Positioned Wrong |
| | | <input type="checkbox"/> Power Loss/Surge |
| | | <input type="checkbox"/> Pressure/Forced |
| | | <input type="checkbox"/> Temperature/Cure |
| | | <input type="checkbox"/> Weld |
| | | <input type="checkbox"/> Wrong Stock Pulled |
| | | <input type="checkbox"/> Other |

Work Order ID 101089

101089

Page 4

April-30-13 2:39:54 PM

Item ID: D2574

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Saddle, Aft In 205

Start Date: 5/06/13 Start Qty: 12.00 ***12***

Cust Item ID:

Required Date: 5/06/13 Req'd Qty: 12.00 ***12***

Customer:

Reference:

Run Start ***NR1***

Approvals: Process Plan: Date: Tooling: Date:

Stop ***NR2***

QC: Date: SPC (Y/N): Date:

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 180 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *180* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

13/7/4
MF
13-7-4

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | | | | | | | | |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data <input type="checkbox"/> | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | |
| Setup <input type="checkbox"/> | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | |

FAULT CATEGORY

| | | |
|---|---|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions |
|---|---|---|

| | |
|--|---|
| <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|--|---|

Picklist Print

April-30-13 2:39:54 PM

Page 1

Work Order ID: 101089
 Parent Item: D2574
 Parent Item Name: Saddle, Aft In 205

Start Date: 5/06/13 Required Date: 5/06/13
 Start Qty: 12.00 Required Qty: 12.00

Comments: IPP Rev: I As Per RevE 06-01-27 JLM

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D6101-005 Saddle Billet | | Manufactured | No | | | 110 | Each | 57.0000 | 1 | 12 | | | |

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| MAT041 | 2 | |
| 76838 | 2 | |
| MAT044 | 53 | |
| 79874 | 7 | |
| 97922 | 6 | |
| → 99218 | 40 | |
| MAT045 | 2 | |
| 88960 | 2 | |

12

OK 13/06/24

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | |
|--|------|------|-----|---|-------------------|---|-------------|--------------|--------------|--|--|
| Work Order: _____ Part No. _____ NCR No. _____ | | | | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | | AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div> | | | | | |
| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector | | |
| Doc/Data | | | | | | | | | | | |
| Equip/Tooling | | | | | | | | | | | |
| Operator | | | | | | | | | | | |
| Material | | | | | | | | | | | |
| Setup | | | | | | | | | | | |
| Other | | | | | | | | | | | |
| Process | | | | | | | | | | | |
| Supplier | | | | | | | | | | | |
| Training | | | | | | | | | | | |
| Unapproved | | | | | | | | | | | |

| FAULT CATEGORY | | | | |
|---|---|---|---|--|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other | |

| | | | |
|---|--|---------------------|--------|
| DART AEROSPACE LTD | | Work Order: | 101089 |
| Description: Saddle, Aft Inboard | | Part Number: | D2574 |
| Inspection Dwg: D2574 Rev. F | | Page 1 of 1 | |

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

| Dim | Min | Max | Go/No Go Gauge | Recorded Actual Dimensions | | | | By | Date |
|---------------|-------|-------|----------------|----------------------------|--------|-------|-------|----|------|
| | | | | 1 | 2 | 3 | 4 | | |
| A | 0.438 | 0.443 | | 0.438 | 0.438 | 0.438 | .438 | | |
| B | 1.745 | 1.755 | | 1.750 | 1.750 | 1.750 | 1.750 | | |
| C | 3.495 | 3.505 | | 3.500 | 3.500 | 3.500 | 3.500 | | |
| D | 1.745 | 1.755 | | 1.750 | 1.750 | 1.750 | 1.750 | | |
| E | 7.990 | 8.010 | | 8.000 | 8.000 | 8.000 | 8.000 | | |
| F | 0.490 | 0.510 | | .503 | .501 | .500 | .500 | | |
| G | 0.257 | 0.262 | | 0.258 | 0.258 | 0.258 | .258 | | |
| H | 0.375 | 0.380 | | 0.377 | 0.377 | 0.377 | .377 | | |
| I | 0.490 | 0.510 | | .500 | .500 | .500 | .501 | | |
| J | 1.174 | 1.184 | | 1.179 | 1.179 | 1.179 | 1.179 | | |
| K | 0.558 | 0.578 | | .568 | .568 | .569 | .569 | | |
| L | 1.174 | 1.184 | | 1.179 | 1.179 | 1.179 | 1.179 | | |
| M | 1.365 | 1.375 | | 1.370 | 1.370 | 1.370 | 1.370 | | |
| N | 2.495 | 2.505 | | 2.500 | 2.500 | 2.500 | 2.500 | | |
| O | 4.119 | 4.129 | | 4.122 | 4.122 | 4.122 | 4.124 | | |
| P | 0.115 | 0.135 | | .126 | .126 | .126 | .126 | | |
| Q | 0.115 | 0.135 | | 0.132 | 0.132 | 0.132 | .135 | | |
| R | 0.240 | 0.260 | | .250 | .251 | .251 | .250 | | |
| S | 0.115 | 0.135 | | 0.132 | 0.132 | 0.132 | .131 | | |
| T | 0.178 | 0.198 | | 0.188 | 0.188 | 0.188 | .188 | | |
| U | 3.210 | 3.250 | | 3.227 | 3.227 | 3.227 | 3.228 | | |
| V | 0.230 | 0.250 | | .238 | .238 | .237 | .238 | | |
| W | 0.115 | 0.135 | | .132 | .132 | .132 | .131 | | |
| X | 0.307 | 0.312 | | .310 | .309 | .309 | .309 | | |
| Y | 0.760 | 0.765 | | 0.760 | 0.760 | 0.760 | .760 | | |
| Z | 0.352 | 0.372 | | .360 | .361 | .361 | .362 | | |
| AA | 0.470 | 0.530 | | 0.500 | 0.500 | 0.500 | .500 | | |
| AB | 0.615 | 0.635 | | 0.625 | 0.625 | 0.625 | .625 | | |
| AC | 0.053 | 0.073 | | 0.063 | 0.063 | 0.063 | .063 | | |
| AD | 0.240 | 0.260 | | .247 | .247 | .248 | .249 | | |
| AE | 1.500 | 1.520 | | 1.512 | 1.513 | 1.512 | 1.510 | | |
| AF | 0.115 | 0.135 | | 0.132 | 0.132 | 0.132 | .135 | | |
| AG | 0.240 | 0.280 | | 0.275 | 0.275 | 0.275 | .275 | | |
| AH | 0.240 | 0.260 | | .249 | .249 | .249 | .248 | | |
| AI | 2.000 | 2.020 | | 2.001 | 2.0015 | 2.001 | 2.000 | | |
| AJ | 0.023 | 0.043 | | 0.033 | 0.033 | 0.033 | .033 | | |
| Accept/Reject | | | | | | | | | |

Measured by: OK
Date: 2013-06-26

Audited by: OK
Date: 13/06/22

| Rev | Date | Change | Revised by | Approved |
|-----|----------|---|------------|----------|
| B | 02.09.27 | Re-format; Added Rev. D | KJ | |
| C | 02.10.11 | Re-format; Added DT8682, DT8683, DT8684 | KJ | |
| D | 05.05.05 | Added dimension AI | KJ/RF | |
| E | 05.12.05 | Added dimension AJ | KJ/JLM | |
| F | 13.03.07 | Dwg Rev updated | KJ | |

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|---|---------------------|-------------|
| DART AEROSPACE LTD | Work Order: | 101089 |
| Description: Saddle, Aft Inboard | Part Number: | D2574 |
| Inspection Dwg: D2574 Rev. F | | Page 1 of 1 |

Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

| | | | | Recorded Actual Dimensions | | | | By | Date |
|---------------|-------|-------|----------------|----------------------------|-------|--------|-------|----|------|
| Dim | Min | Max | Go/No Go Gauge | 15 | 26 | 82 | 88 | | |
| A | 0.438 | 0.443 | | .438 | .438 | .438 | .438 | | |
| B | 1.745 | 1.755 | | 1.750 | 1.750 | 1.750 | 1.750 | | |
| C | 3.495 | 3.505 | | 3.500 | 3.500 | 3.500 | 3.500 | | |
| D | 1.745 | 1.755 | | 1.750 | 1.750 | 1.750 | 1.750 | | |
| E | 7.990 | 8.010 | | 8.000 | 8.000 | 8.000 | 8.000 | | |
| F | 0.490 | 0.510 | | .501 | .500 | .500 | .500 | | |
| G | 0.257 | 0.262 | | .258 | .258 | .258 | .258 | | |
| H | 0.375 | 0.380 | | .377 | .377 | .377 | .377 | | |
| I | 0.490 | 0.510 | | .501 | .501 | .501 | .501 | | |
| J | 1.174 | 1.184 | | 1.179 | 1.179 | 1.179 | 1.179 | | |
| K | 0.558 | 0.578 | | .569 | .569 | .569 | .569 | | |
| L | 1.174 | 1.184 | | 1.179 | 1.179 | 1.179 | 1.179 | | |
| M | 1.365 | 1.375 | | 1.370 | 1.370 | 1.370 | 1.370 | | |
| N | 2.495 | 2.505 | | 2.500 | 2.500 | 2.500 | 2.500 | | |
| O | 4.119 | 4.129 | | 4.124 | 4.124 | 4.124 | 4.124 | | |
| P | 0.115 | 0.135 | | .126 | .126 | .126 | .126 | | |
| Q | 0.115 | 0.135 | | .135 | .135 | .135 | .135 | | |
| R | 0.240 | 0.260 | | .251 | .251 | .252 | .252 | | |
| S | 0.115 | 0.135 | | .131 | .132 | .131 | .131 | | |
| T | 0.178 | 0.198 | | .188 | .188 | .188 | .188 | | |
| U | 3.210 | 3.250 | | 3.228 | 3.228 | 3.227 | 3.227 | | |
| V | 0.230 | 0.250 | | .239 | .238 | .238 | .238 | | |
| W | 0.115 | 0.135 | | .132 | .131 | .133 | .133 | | |
| X | 0.307 | 0.312 | | .310 | .310 | .310 | .310 | | |
| Y | 0.760 | 0.765 | | .760 | .760 | .760 | .760 | | |
| Z | 0.352 | 0.372 | | .360 | .360 | .360 | .360 | | |
| AA | 0.470 | 0.530 | | .500 | .500 | .500 | .500 | | |
| AB | 0.615 | 0.635 | | .625 | .625 | .625 | .625 | | |
| AC | 0.053 | 0.073 | | .063 | .063 | .063 | .063 | | |
| AD | 0.240 | 0.260 | | .249 | .248 | .247 | .249 | | |
| AE | 1.500 | 1.520 | | 1.511 | 1.511 | 1.5125 | 1.513 | | |
| AF | 0.115 | 0.135 | | .135 | .135 | .135 | .135 | | |
| AG | 0.240 | 0.280 | | .275 | .275 | .275 | .275 | | |
| AH | 0.240 | 0.260 | | .250 | .249 | .249 | .249 | | |
| AI | 2.000 | 2.020 | | 2.001 | 2.001 | 2.003 | 2.002 | | |
| AJ | 0.023 | 0.043 | | .033 | .033 | .033 | .033 | | |
| Accept/Reject | | | | | | | | | |

| | |
|--------------|------------|
| Measured by: | <i>ant</i> |
| Date: | 13/06/22 |

| | |
|-------------|------------|
| Audited by: | <i>J-B</i> |
| Date: | 13.6.29 |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|---|------------|----------|
| B | 02.09.27 | Re-format; Added Rev. D | KJ | |
| C | 02.10.11 | Re-format; Added DT8682, DT8683, DT8684 | KJ | |
| D | 05.05.05 | Added dimension AI | KJ/RF | |
| E | 05.12.05 | Added dimension AJ | KJ/JLM | |
| F | 13.03.07 | Dwg Rev updated | KJ | |

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|---|---------------------|-------------|
| DART AEROSPACE LTD | Work Order: | 101089 |
| Description: Saddle, Aft Inboard | Part Number: | D2574 |
| Inspection Dwg: D2574 Rev. F | | Page 1 of 1 |

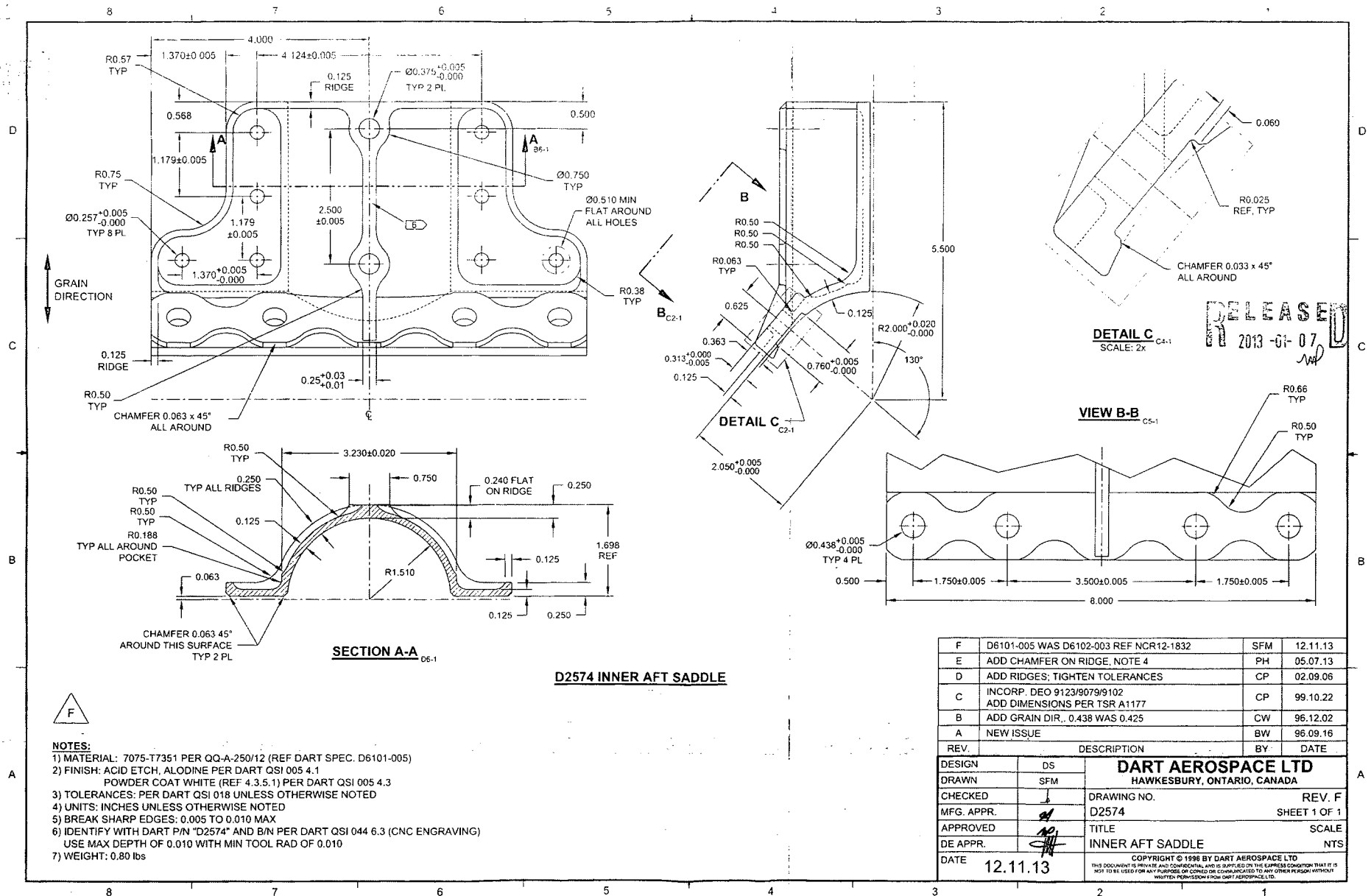
Inspect dimensions highlighted on inspection sheet drawing D2574 Rev. E and record below:

| | | | | Recorded Actual Dimensions | | | | By | Date |
|---------------|-------|-------|----------------|----------------------------|-------|-------|-------|----|------|
| Dim | Min | Max | Go/No Go Gauge | X9 | X10 | X11 | X12 | | |
| A | 0.438 | 0.443 | | .258 | .258 | .258 | .258 | | |
| B | 1.745 | 1.755 | | 1.750 | 1.750 | 1.750 | 1.750 | | |
| C | 3.495 | 3.505 | | 3.500 | 3.500 | 3.500 | 3.500 | | |
| D | 1.745 | 1.755 | | 1.750 | 1.750 | 1.750 | 1.750 | | |
| E | 7.990 | 8.010 | | 8.000 | 8.000 | 8.001 | 8.000 | | |
| F | 0.490 | 0.510 | | .500 | .500 | .502 | .501 | | |
| G | 0.257 | 0.262 | | .258 | .258 | .258 | .258 | | |
| H | 0.375 | 0.380 | | .377 | .377 | .377 | .377 | | |
| I | 0.490 | 0.510 | | .500 | .501 | .502 | .502 | | |
| J | 1.174 | 1.184 | | 1.179 | 1.179 | 1.179 | 1.179 | | |
| K | 0.558 | 0.578 | | .569 | .569 | .569 | .569 | | |
| L | 1.174 | 1.184 | | 1.179 | 1.179 | 1.179 | 1.179 | | |
| M | 1.365 | 1.375 | | 1.370 | 1.370 | 1.370 | 1.370 | | |
| N | 2.495 | 2.505 | | 2.500 | 2.500 | 2.500 | 2.500 | | |
| O | 4.119 | 4.129 | | 4.124 | 4.124 | 4.124 | 4.124 | | |
| P | 0.115 | 0.135 | | .126 | .126 | .126 | .126 | | |
| Q | 0.115 | 0.135 | | .135 | .135 | .135 | .135 | | |
| R | 0.240 | 0.260 | | .257 | .257 | .257 | .257 | | |
| S | 0.115 | 0.135 | | .130 | .130 | .130 | .131 | | |
| T | 0.178 | 0.198 | | .188 | .188 | .188 | .188 | | |
| U | 3.210 | 3.250 | | 3.227 | 3.227 | 3.227 | 3.227 | | |
| V | 0.230 | 0.250 | | .239 | .239 | .240 | .238 | | |
| W | 0.115 | 0.135 | | .132 | .132 | .132 | .132 | | |
| X | 0.307 | 0.312 | | .310 | .310 | .310 | .310 | | |
| Y | 0.760 | 0.765 | | .760 | .760 | .760 | .760 | | |
| Z | 0.352 | 0.372 | | .360 | .360 | .360 | .360 | | |
| AA | 0.470 | 0.530 | | .500 | .500 | .500 | .500 | | |
| AB | 0.615 | 0.635 | | .625 | .625 | .625 | .625 | | |
| AC | 0.053 | 0.073 | | .063 | .063 | .063 | .063 | | |
| AD | 0.240 | 0.260 | | .247 | .247 | .249 | .246 | | |
| AE | 1.500 | 1.520 | | 1.515 | 1.511 | 1.515 | 1.512 | | |
| AF | 0.115 | 0.135 | | .135 | .135 | .135 | .135 | | |
| AG | 0.240 | 0.280 | | .275 | .275 | .275 | .275 | | |
| AH | 0.240 | 0.260 | | .249 | .249 | .250 | .249 | | |
| AI | 2.000 | 2.020 | | 2.0025 | 2.002 | 2.002 | 2.003 | | |
| AJ | 0.023 | 0.043 | | .033 | .033 | .033 | .033 | | |
| Accept/Reject | | | | | | | | | |

| | |
|--------------|--------------------|
| Measured by: | <i>[Signature]</i> |
| Date: | 13/06/27 |

| | |
|-------------|--------------------|
| Audited by: | <i>[Signature]</i> |
| Date: | 13.6.29 |

| Rev | Date | Change | Revised by | Approved |
|-----|----------|---|------------|--------------------|
| B | 02.09.27 | Re-format; Added Rev. D | KJ | |
| C | 02.10.11 | Re-format; Added DT8682, DT8683, DT8684 | KJ | |
| D | 05.05.05 | Added dimension AI | KJ/RF | |
| E | 05.12.05 | Added dimension AJ | KJ/JLM | |
| F | 13.03.07 | Dwg Rev updated | KJ | <i>[Signature]</i> |



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101089 MCT

13-05-01

